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Conference Abstract

Conservation Implications of Taxonomic Intelligence: A case study of *Trillium*

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Abstract

Taxonomy is integral to the conservation of species, yet the complexities associated with differing taxonomic perspectives present challenges to identifying the species most in need of conservation. The NatureServe Network maintains the most comprehensive data on rare plants and animals in the United States and Canada. Our central database maintains the taxonomic framework for over 80 member programs, requiring regular two-way data exchange. NatureServe's database actively manages different taxonomic concepts along with relevant downstream data such as conservation status and species occurrences. Here we present NatureServe's current process for maintaining taxonomic intelligence, and illustrate both challenges and successes in our approach. Through a case study of the genus *Trillium*, we also demonstrate how taxonomic intelligence is foundational to assigning conservation status. *Trillium* is a well known and widespread genus of spring wildflowers, some of which are used medicinally or ornamentally. We will focus on the *Trillium pusillum* complex, an active area of research, to show how taxonomic changes affect both conservation status and downstream data.

Keywords

concept mapping, Global Ranks, Red List

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Conflicts of interest

None to declare